REMARKS

In this amendment, claims 48-57 have been added. Accordingly, claims 1-7, 9-11, 13-23, 25-28, 30-33, 35-38 and 48-57 are pending in the present application. No new matter has been added.

Reconsideration and allowance are respectfully requested in view of the following remarks.

Claim Rejections Under 35 U.S.C. § 103

Claims 1-7, 11, 13-16, 17-23, 27-28, 30-34 and 37-38 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Bellagarda et al. (Article entitled "Exploiting Latent Semantic Information in Statistical Language Modeling", hereinafter " Bellagarda") in view of Oliver et al. (U.S. Patent No. 7,158,986, hereinafter "Oliver"). Applicants respectfully traverse the rejections.

As previously submitted in the March 26, 2008 Amendment, Applicants have disclosed that suitable thresholds can be established to implement any desired level of granularity (specification at page 10, paragraph [0030]). Applicants have further disclosed that a first threshold can be defined to establish the lowest level of clusters into which the documents will be grouped, and additional thresholds can define higher level clusters, or "super clusters", in which plural lower-level clusters are grouped (specification at page 11, paragraph [0030]).

In addition, Applicants have disclosed exemplary embodiments in which cluster variances can be suitable thresholds established to implement any desired level of granularity (specification at page 11, paragraph [0030], see particularly equation (4)).

Claim 1 recites a method of displaying files within a file system to a user in a semantic hierarchy, the method comprising the steps of, *inter alia*, clustering the files within said space, wherein multiple threshold values that are settable to desired levels of granularity are defined, and said files are clustered based on said multiple threshold values.

The Examiner relies upon a paragraph under the subtitle "Word Clustering" in page 1284 of Bellagarda as allegedly disclosing the above-recited features. Applicants respectfully disagree.

Bellagarda discloses a matrix representation for latent semantic analysis. Referring to FIG. 1 of Bellagarda, in the matrix, each of the rows is a document vector, uniquely associated with document d_j in the corpus. Each of the columns of the matrix is a word vector, uniquely associated with word w_i in the vocabulary of the documents. See also Bellagarda: the paragraph bridging the left and right columns in page 1282.

The relied upon paragraph in page 1284 of Bellagarda discloses clustering of the word vector w_i. Specifically, Bellagarda discloses that since the number of word vectors is large, clustering of word vectors is done in stages, for example, using K-means and bottom-up sequentially. In that case, K-means clustering is used to obtain a coarse partition of the vocabulary into a set of superclusters. Each supercluster of words is then partitioned using bottom-up clustering.

The sequence of clustering stages in Bellagarda is used to cluster words used in the documents. In other words, the sequence of clustering stages in Bellagarda is used to divide the matrix representation, illustrated in FIG. 1 of Bellagarda, into several smaller matrixes, each of the smaller matrixes has a smaller word vector,

i.e., less rows, comparing to the entire matrix representation in FIG. 1. Such sequence of clustering stages in Bellagarda, however, is not used to cluster the documents. In other words, after performing the sequence of clustering stages as disclosed in page 1284 of Bellagarda, the documents remain in a single collection, and are not clustered. Neither the sequence of clustering stages as disclosed in page 1284 of Bellagarda nor the remaining disclosure in Bellagarda teaches or suggests clustering the files within said space, wherein multiple threshold values that are settable to desired levels of granularity are defined, and said files are clustered based on said multiple threshold values, as recited in claim 1.

In addition, Applicants maintain the arguments in the February 13, 2009 Amendment.

Oliver is relied upon for its alleged teaching of deriving a hierarchy of plural level of clusters from said clustering and displaying the files in hierarchical format of plural level of clusters based on the derived hierarchy.

Oliver discloses clustering new documents into different interest folders. FIG. 6 shows a user profile 600 comprising two different interest folders 602, 604 for a user of an on-line auction Web site. Each interest folder has an associated set of keywords 612 that summarize the most important concepts of the particular interest folder.

Oliver does not teach or suggest deriving a hierarchy from the clusters that has multiple levels. Oliver merely discloses individual document clusters, or interest folders, in a disjointed manner. However, Oliver does not have any disclosure of any relationship between folders, as would be indicated by a hierarchy.

In addition, Oliver does not remedy the deficiencies of Bellagarda. Neither does the Office Action contend that Oliver remedies the deficiencies of Bellagarda.

In view of the foregoing, claim 1 is patentable. The remaining independent claims are patentable for reasons similar to those for claim 1 because the remaining independent claims include distinguishing features similar to those of claim 1. Claims 2-7, 13-16, 18-23, 27, 30-34 and 37 are patentable at least because of their dependencies.

Claims 9-10, 25-26 and 35-36 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Bellagarda et al. in view of Oliver as applied to claims 1-7, 11, 13-16, 17-23, 27-28, 30-34 and 37-38, and further in view of Kusama (U.S. Patent No. 7,085,767, hereinafter "Kusama").

Kusama is relied upon for its alleged teaching of labeling the clusters by selecting representative words based on the closeness of their vectors to the document vectors in a cluster.

Kusama does not remedy the deficiencies of Bellagarda and Oliver. Neither does the Office Action contend that Kusama remedies the deficiencies of Bellagarda and Oliver. Therefore, claims 9-10, 25-26 and 35-36 are patentable.

Applicants reserve the right to challenge the Examiner's interpretation of the secondary references, as well as the motivation for combining one or both of them with the Bellagarda, at a later time if necessary and appropriate. In addition, Applicants reserve the right to challenge the Examiner's interpretation of the dependent claims, at a later time if necessary and appropriate.

New claims

Claims 48-57 have been added to more particularly describe certain aspects of the invention. Claims 48-57 are patentable at least because of their dependencies.

C O N C L U S I O N

From the foregoing, further and favorable action in the form of a Notice of Allowance is respectfully requested and such action is earnestly solicited.

In the event that there are any questions concerning this amendment, or the application in general, the Examiner is respectfully requested to telephone the undersigned so that prosecution of present application may be expedited.

Respectfully submitted,

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